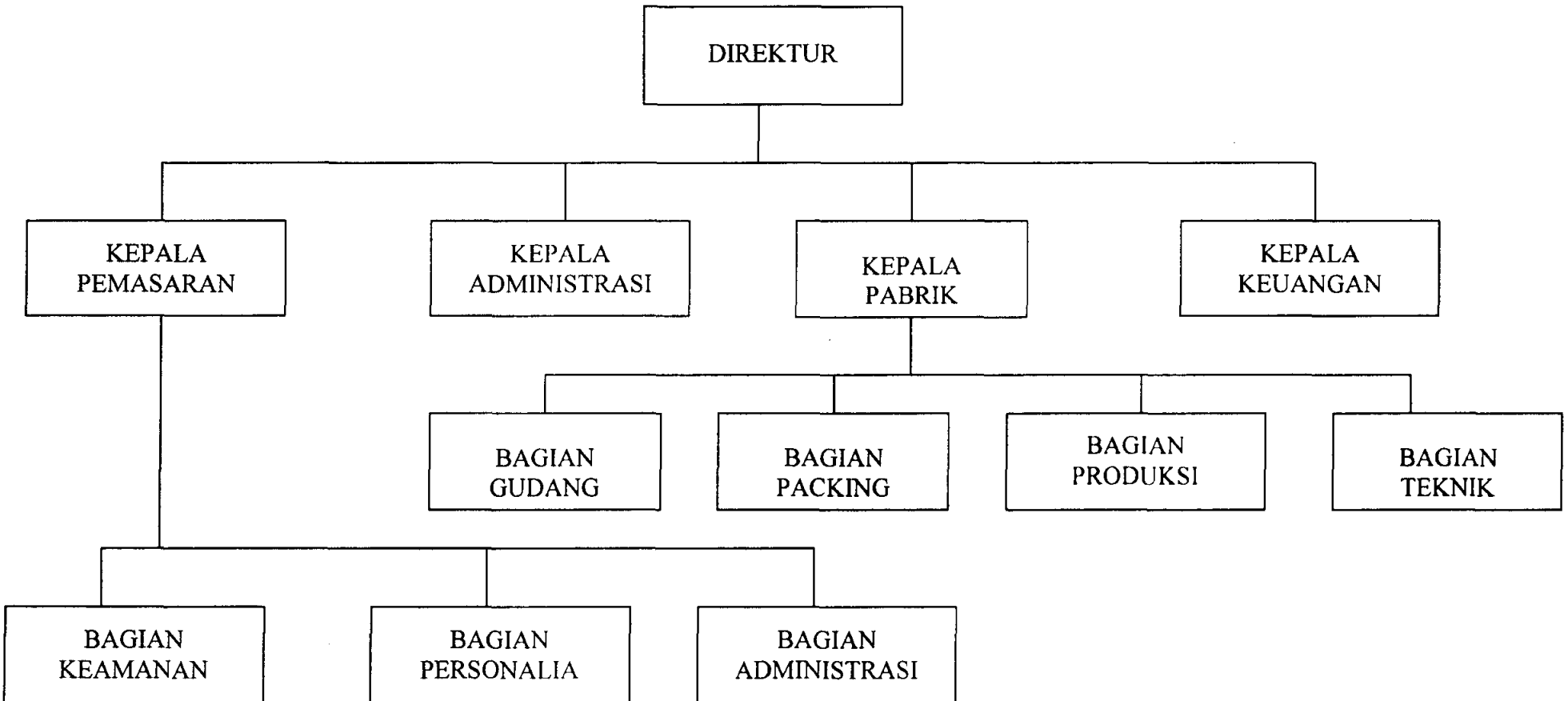


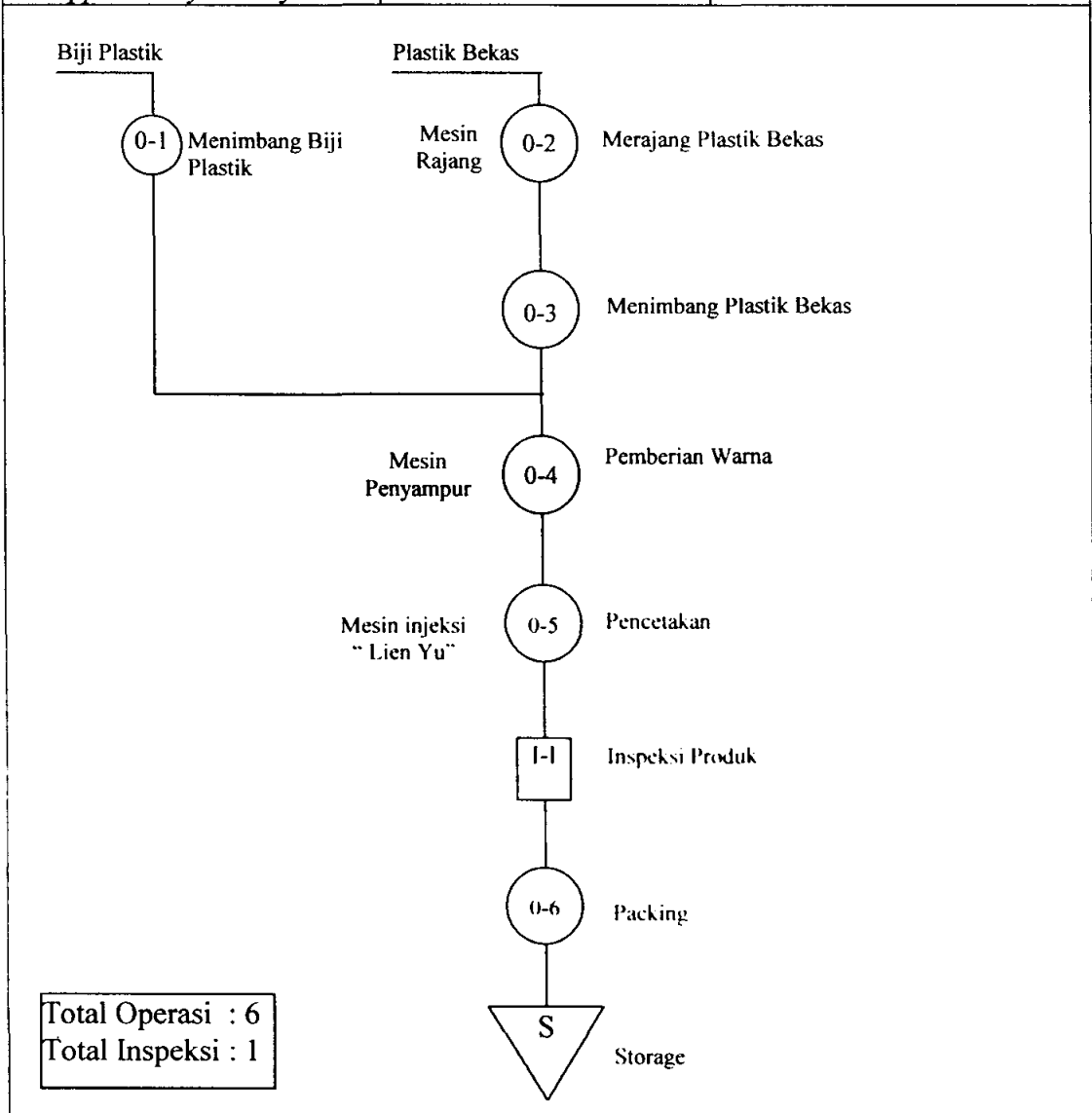
LAMPIRAN

PT. GARUDA PLASTIK

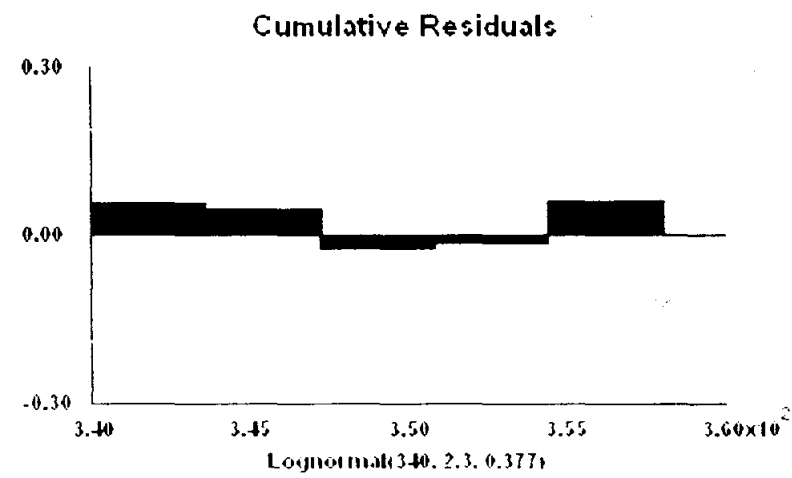
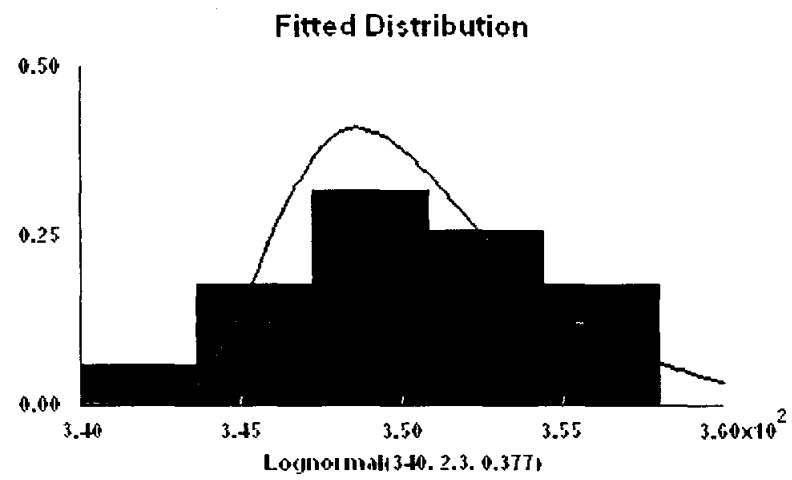


Gambar 4.3.1 Struktur organisasi PT. Garuda Plastik

<i>Operation Process Chart</i>		<i>Worker/ Material/ Equipment Type</i>
<i>Chart No. 1</i>	<i>Sheet No. 1</i>	<i>OF.1</i>
<i>Subject Charted</i> Pembuatan Pot Plastik		
<i>Activity : Pembuatan Pot Plastik</i>		
<i>Method : Present</i> <i>Location : Plant Production</i>		
	<i>Clock : 08.00 – 16.00</i>	
<i>Charted By : Gondo</i> <i>Approved By : Wahyudi</i>	<i>Date 25 - 08 - 2005</i> <i>Date 27 - 08 - 2005</i>	



Distribusi Kontaktor



Auto::Fit Distributions

distribution	rank	acceptance
Lognormal(340, 2.3, 0.377)	97.5	accept
Beta(340, 358, 3.54, 2.69)	56	accept
Weibull(340, 3.16, 11.9)	43.3	accept
Pearson 5(340, 6.59, 60.8)	38.5	accept
Uniform(340, 358)	0.0276	reject
Triangular(340, 358, 358)	5.24e-05	reject

goodness of fit

data points	50
estimates	maximum likelihood estimates
accuracy of fit	0.0003
level of significance	0.05

summary

distribution	Chi Squared	Kolmogorov Smirnov	Anderson Darling
beta(340, 358, 3.54, 2.69)	4.8 (4)	0.112	10.6
lognormal(340, 2.3, 0.377)	2.4 (4)	0.113	4.63
pearson 5(340, 6.59, 60.8)	8.8 (4)	0.143	5.01
triangular(340, 358, 358)	19.2 (4)	0.307	9.53
uniform(340, 358)	9.6 (4)	0.233	12.7
weibull(340, 3.16, 11.9)	4.8 (4)	0.139	4.46

detail

beta	
minimum	= 340 [fixed]
maximum	= 358
p	= 3.54237
q	= 2.68902
Chi Squared	
total classes	5
interval type	equal probable
net bins	5
chi**2	4.8
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.308
result	DO NOT REJECT
Kolmogorov-Smirnov	
data points	50
ks stat	0.112
alpha	0.05
ks stat(50,0.05)	0.188
p-value	0.519
result	DO NOT REJECT

Anderson-Darling

data points	45
ad stat	10.6
alpha	0.05
ad stat(0.05)	2.49
p-value	0
result	REJECT

ognormal

minimum = 340 [fixed]

mu = 2.29942

sigma = 0.377479

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	2.4
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.663
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	50
ks stat	0.113
alpha	0.05
ks stat(50,0.05)	0.188
p-value	0.506
result	DO NOT REJECT

Anderson-Darling

data points	48
ad stat	4.63
alpha	0.05
ad stat(0.05)	2.49
p-value	0.00432
result	REJECT

Pearson 5

minimum = 340 [fixed]

alpha = 6.59159

beta = 60.7915

Chi Squared

total classes	5
interval type	equal probable
net bins	5

chi**2	8.8
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.0663
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	50
ks stat	0.143
alpha	0.05
ks stat(50,0.05)	0.188
p-value	0.231
result	DO NOT REJECT

Anderson-Darling

data points	48
ad stat	5.01
alpha	0.05
ad stat(0.05)	2.49
p-value	0.00286
result	REJECT

triangular

minimum = 340 [fixed]
 maximum = 358.182
 mode = 357.818

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	19.2
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.000718
result	REJECT

Kolmogorov-Smirnov

data points	50
ks stat	0.307
alpha	0.05
ks stat(50,0.05)	0.188
p-value	0.000114
result	REJECT

Anderson-Darling

data points	48
ad stat	9.53

alpha	0.05
ad stat(0.05)	2.49
p-value	0
result	REJECT

uniform

minimum = 340 [fixed]
maximum = 358

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	9.6
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.0477
result	REJECT

Kolmogorov-Smirnov

data points	50
ks stat	0.233
alpha	0.05
ks stat(50,0.05)	0.188
p-value	0.00707
result	REJECT

Anderson-Darling

data points	45
ad stat	12.7
alpha	0.05
ad stat(0.05)	2.49
p-value	0
result	REJECT

Weibull

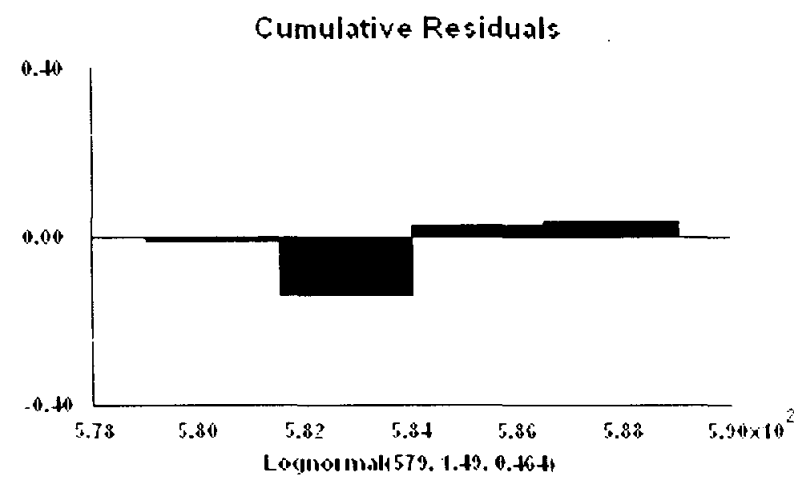
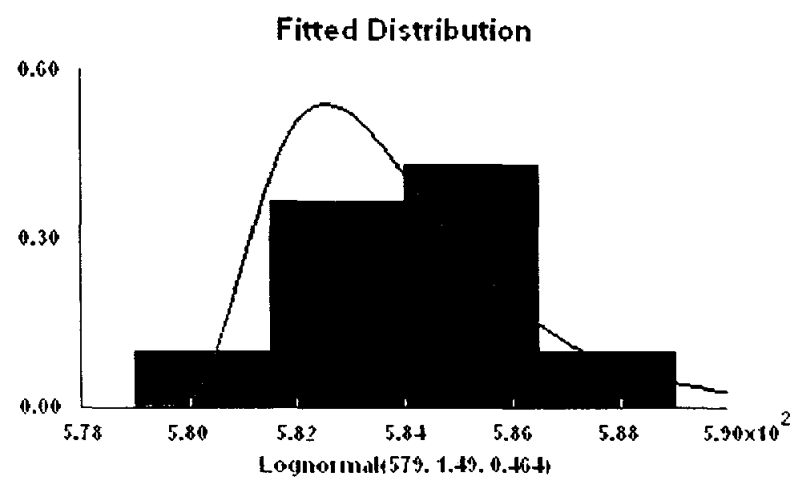
minimum = 340 [fixed]
alpha = 3.15575
beta = 11.9066

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	4.8
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49

p-value	0.308
result	DO NOT REJECT
Kolmogorov-Smirnov	
data points	50
ks stat	0.139
alpha	0.05
ks stat(50,0.05)	0.188
p-value	0.264
result	DO NOT REJECT
Anderson-Darling	
data points	48
ad stat	4.46
alpha	0.05
ad stat(0.05)	2.49
p-value	0.00522
result	REJECT

Distribusi Oring



Auto::Fit Distributions

distribution	rank	acceptance
Lognormal(579, 1.49, 0.464)	97.9	accept
Log-Logistic(579, 4, 4.53)	96.6	accept
Pearson 6(579, 79.8, 5.67, 93.9)	85.3	accept
Erlang(579, 8, 0.588)	56.6	accept
Pearson 5(579, 4.11, 16)	55.8	accept
Beta(579, 615, 4.76, 31)	51.5	accept
Gamma(579, 8.28, 0.568)	48.7	accept
Inverse Gaussian(579, 22.7, 4.7)	47.8	accept
Weibull(579, 2.57, 5.48)	35.1	accept
Uniform(579, 589)	0.784	accept
Exponential(579, 4.7)	0.00292	reject
Pareto(579, 124)	0.00276	reject
Triangular(579, 589, 589)	0	reject

goodness of fit

data points 30
estimates maximum likelihood estimates
accuracy of fit 0.0003
level of significance 0.05

summary

distribution	Chi Squared	Kolmogorov Smirnov	Anderson Darling
beta(579, 615, 4.76, 31)	2.27 (3)	0.159	2.53
lang(579, 8, 0.588)	1.2 (3)	0.155	3.17
ponential(579, 4.7)	11.9 (3)	0.372	6.19
gamma(579, 8.28, 0.568)	1.2 (3)	0.16	3.27
verse Gaussian(579, 22.7, 4.7)	1.2 (3)	0.173	2.99
g-Logistic(579, 4, 4.53)	1.2 (3)	0.139	2.65
gnormal(579, 1.49, 0.464)	2.27 (3)	0.138	2.72
reto(579, 124)	11.9 (3)	0.373	6.21
earson 5(579, 4.11, 16)	2.27 (3)	0.158	3.17
earson 6(579, 79.8, 5.67, 93.9)	2.27 (3)	0.148	2.55
angular(579, 589, 589)	19.3 (3)	0.483	12.9
uniform(579, 589)	11.1 (3)	0.233	5.86
reibull(579, 2.57, 5.48)	2.27 (3)	0.187	2.52

detail

beta

minimum = 579 [fixed]
maximum = 615.478
p = 4.75587
q = 30.9543

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	2.27
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.519
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.159
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.396
result	DO NOT REJECT

Anderson-Darling

data points	29
ad stat	2.53
alpha	0.05
ad stat(0.05)	2.49
p-value	0.048
result	REJECT

rlang

minimum = 579 [fixed]
m = 8
beta = 0.5875

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	1.2
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.753
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.155
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.422
result	DO NOT REJECT

Anderson-Darling

data points	29
ad stat	3.17
alpha	0.05
ad stat(0.05)	2.49
p-value	0.0224
result	REJECT

xponential

minimum = 579 [fixed]

beta = 4.7

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	11.9
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.00785
result	REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.372
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.000313
result	REJECT

Anderson-Darling

data points	29
ad stat	6.19
alpha	0.05
ad stat(0.05)	2.49
p-value	0.000783
result	REJECT

amma

minimum = 579 [fixed]

alpha = 8.27723

beta = 0.567823

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	1.2
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.753
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.16
alpha	0.05

ks stat(30,0.05)	0.242
p-value	0.383
result	DO NOT REJECT

Anderson-Darling

data points	29
ad stat	3.27
alpha	0.05
ad stat(0.05)	2.49
p-value	0.02
result	REJECT

verse Gaussian

minimum	=	579 [fixed]
alpha	=	22.6952
beta	=	4.7

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	1.2
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.753
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.173
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.294
result	DO NOT REJECT

Anderson-Darling

data points	29
ad stat	2.99
alpha	0.05
ad stat(0.05)	2.49
p-value	0.0277
result	REJECT

.og-Logistic

minimum	=	579 [fixed]
p	=	3.99844
beta	=	4.53316

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	1.2
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.753
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.139
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.561
result	DO NOT REJECT

Anderson-Darling

data points	29
ad stat	2.65
alpha	0.05
ad stat(0.05)	2.49
p-value	0.0413
result	REJECT

ognormal

minimum = 579 [fixed]
mu = 1.48594
sigma = 0.464431

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	2.27
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.519
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.138
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.569
result	DO NOT REJECT

Anderson-Darling

data points	29
ad stat	2.72
alpha	0.05
ad stat(0.05)	2.49
p-value	0.0379
result	REJECT

areto

minimum = 579 [fixed]

alpha = 123.796

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	11.9
degrees of freedom	3
alpha	0.05
chi**2(3,0.05)	7.81
p-value	0.00785
result	REJECT

Kolmogorov-Smirnov

data points	30
ks stat	0.373
alpha	0.05
ks stat(30,0.05)	0.242
p-value	0.000302
result	REJECT

Anderson-Darling

data points	29
ad stat	6.21
alpha	0.05
ad stat(0.05)	2.49
p-value	0.000772
result	REJECT

earson 5

minimum = 579 [fixed]

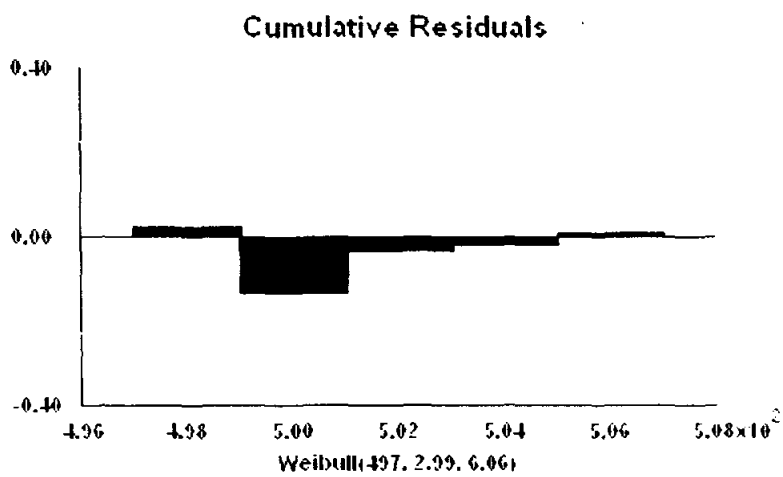
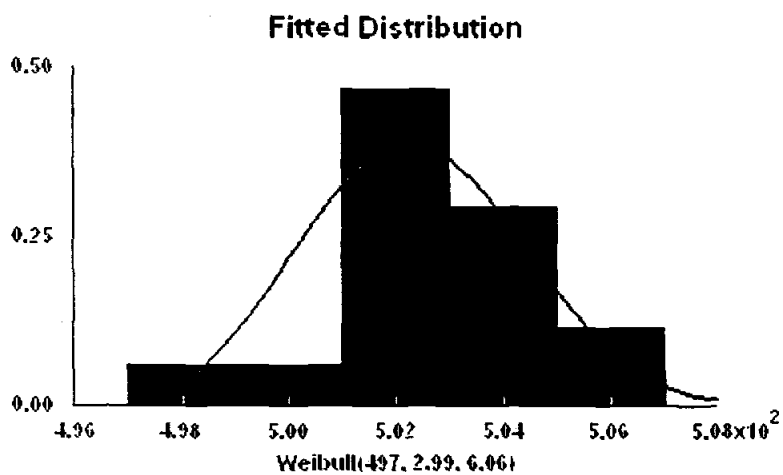
alpha = 4.10894

beta = 15.9988

Chi Squared

total classes	4
interval type	equal probable
net bins	4
chi**2	2.27

Distribusi Soket



Auto::Fit Distributions

distribution	rank	acceptance
Weibull(497, 2.99, 6.06)	100	accept
Beta(497, 507, 4.17, 4.03)	29.2	accept
Lognormal(497, 1.61, 0.448)	20.2	accept
Pearson 5(497, 4, 17.5)	2.79	reject
Uniform(497, 507)	0.0867	reject
Triangular(497, 507, 507)	0	reject

goodness of fit

data points 34
 estimates maximum likelihood estimates
 accuracy of fit 0.0003
 level of significance 0.05

summary

distribution	Chi Squared	Kolmogorov Smirnov	Anderson Darling
beta(497, 507, 4.17, 4.03)	3.06 (4)	0.186	6.94
lognormal(497, 1.61, 0.448)	5.41 (4)	0.206	3.77
gamma(497, 4, 17.5)	5.41 (4)	0.244	4.71
exponential(497, 507, 507)	21.9 (4)	0.405	9.87
uniform(497, 507)	21.9 (4)	0.282	8.39
weibull(497, 2.99, 6.06)	5.41 (4)	0.157	2.91

detail

beta
 minimum = 497 [fixed]
 maximum = 507
 p = 4.1713
 q = 4.0333

Chi Squared

total classes 5
 interval type equal probable
 net bins 5
 chi**2 3.06
 degrees of freedom 4
 alpha 0.05
 chi**2(4,0.05) 9.49
 p-value 0.548
 result DO NOT REJECT

Kolmogorov-Smirnov

data points 34
 ks stat 0.186
 alpha 0.05
 ks stat(34,0.05) 0.227
 p-value 0.169
 result DO NOT REJECT

Anderson-Darling

data points	31
ad stat	6.94
alpha	0.05
ad stat(0.05)	2.49
p-value	0
result	REJECT

gnormal

minimum	=	497 [fixed]
mu	=	1.60899
sigma	=	0.448

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	5.41
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.248
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	34
ks stat	0.206
alpha	0.05
ks stat(34,0.05)	0.227
p-value	0.0956
result	DO NOT REJECT

Anderson-Darling

data points	33
ad stat	3.77
alpha	0.05
ad stat(0.05)	2.49
p-value	0.0113
result	REJECT

earson 5

minimum	=	497 [fixed]
alpha	=	3.99815
beta	=	17.5418

Chi Squared

total classes	5
interval type	equal probable
net bins	5

chi**2	5.41
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.248
result	DO NOT REJECT

Kolmogorov-Smirnov

data points	34
ks stat	0.244
alpha	0.05
ks stat(34,0.05)	0.227
p-value	0.0288
result	REJECT

Anderson-Darling

data points	33
ad stat	4.71
alpha	0.05
ad stat(0.05)	2.49
p-value	0.00398
result	REJECT

triangular

minimum = 497 [fixed]
maximum = 507.149
mode = 506.851

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	21.9
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.000212
result	REJECT

Kolmogorov-Smirnov

data points	34
ks stat	0.405
alpha	0.05
ks stat(34,0.05)	0.227
p-value	1.53e-05
result	REJECT

Anderson-Darling

data points	33
ad stat	9.87

alpha	0.05
ad stat(0.05)	2.49
p-value	0
result	REJECT

iform

minimum = 497 [fixed]

maximum = 507

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	21.9
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49
p-value	0.000212
result	REJECT

Kolmogorov-Smirnov

data points	34
ks stat	0.282
alpha	0.05
ks stat(34,0.05)	0.227
p-value	0.00685
result	REJECT

Anderson-Darling

data points	31
ad stat	8.39
alpha	0.05
ad stat(0.05)	2.49
p-value	0
result	REJECT

Veibull

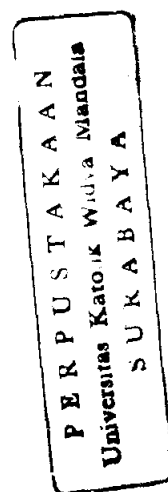
minimum = 497 [fixed]

alpha = 2.98645

beta = 6.05581

Chi Squared

total classes	5
interval type	equal probable
net bins	5
chi**2	5.41
degrees of freedom	4
alpha	0.05
chi**2(4,0.05)	9.49



p-value	0.248
result	DO NOT REJECT
Kolmogorov-Smirnov	
data points	34
ks stat	0.157
alpha	0.05
ks stat(34,0.05)	0.227
p-value	0.336
result	DO NOT REJECT
Anderson-Darling	
data points	33
ad stat	2.91
alpha	0.05
ad stat(0.05)	2.49
p-value	0.0304
result	REJECT